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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,016

11/01/2005

Hideyuki Nakamura

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EXAMINER

SCHILLING, RICHARD L

ART UNIT

PAPER NUMBER

1752

MAIL DATE

DELIVERY MODE

08/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/555,016

Applicant(s)

NAKAMURA ET AL.

Examiner

Richard L. Schilling

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11-01-05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11-1-05;10-17-06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 8-12 and 15-17 are rejected under 35 U.S.C. 102(a or e) as being anticipated by Yoshinari '157. Yoshinari (paragraphs 14-20, 33, 34, 251-254, 333-335; ex. 1) discloses transfer elements with transfer layers containing white Ti oxide of preferably .2-.3 microns. Example 1 has TiO₂ of .3 microns in a transfer layer 2 microns thick.

2. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinari^{'157} in view of Weidner'827. Since Weidner (col. 4, lines 55-67; col.7, line 56-col. 8, line 49; ex.1) teaches adding brighteners to Ti oxide white thermal transfer layers in order to increase the whiteness of thermally transferred white pigment images, it would

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be obvious to one skilled in the art to add brighteners to the Ti oxide transfer layers of Yoshinari to increase transfer image whiteness.

3. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinari^{1/57} in view of Hoffend. Since Hoffend (paragraphs 62-66) teaches using interlayers between light to heat conversion layers and thermal transfer layers with pigments to prevent conversion layer transfer, it would be obvious to one skilled in the art to use interlayers in the thermal transfer donors of Yoshinari et al in order to prevent conversion layer transfer.

4. Claims 1-5, 8-13 and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Konuma '060. Konuma (col. 1, line 65- col. 2, line 65; col. 9, lines 22-66; ex. 1) discloses transfer donors with white pigment, e.g. TiO₂, transfer layers of thicknesses < 2 microns and preferred TiO₂ diameters of .2-.3 microns.

5. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konuma in view of Weidner et al. Since Weidner teaches adding brighteners to white pigment thermal transfer layers to increase image whiteness, it would be obvious to one skilled in the art to add brighteners to the transfer layers of Konuma..

6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konuma in view of Hoffend. It would be obvious to one skilled in the art to use the interlayers of Hoffend in the donors of Konuma in order to prevent light to heat conversion layer transfer in accordance with the teachings in Hoffend.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

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obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-5, 8-12 and 15-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of US patent 6911294. Although the conflicting claims are not identical, they are not patentably distinct from each other because the TiO₂ of the claims of the patent include the preferred pigment diameters disclosed in its specification.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

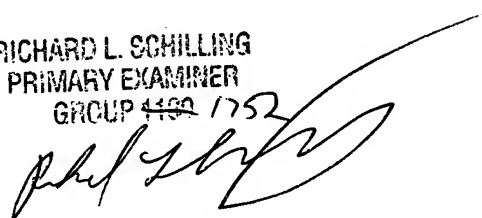
8. Claims 1-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6911294 in view of Hoffend and Weidner. It would be obvious to one skilled in the art to use the interlayers of Hoffend in the donors of the claims of the patent and to use the brighteners of Weidner in the transfer layers of the claims of the patent for the reasons as set forth in paragraphs 2 and 3 above.

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9. The prior art cited by applicants has been considered. Chou is cited of interest as disclosing white pigment transfer. Nakamura et al. is cited as disclosing pigment transfer donors.

Any inquiry concerning this communication should be directed to Richard L. Schilling at telephone number 571-272-1335.

RICHARD L. SCHILLING
PRIMARY EXAMINER
GROUP 4100 1752

A handwritten signature in black ink, appearing to read 'Richard L. Schilling', is written over the printed name and title.